

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-05-C-0188 MOD/AMD P00004	Page 2 of 11
Name of Offeror or Contractor: ADVANCED PROPULSION TECHNOLOGIES INC.		

SECTION A - SUPPLEMENTAL INFORMATION

1. The two purposes of bilateral Modification P00004 are to add \$546,201 cost for the Contractor to (i) design, develop, build, test, demonstrate, and deliver four (4) prototype Opposed Piston Opposed Cylinder (OPOC) engine-powered Auxiliary Power Units (APUs) meeting this contract's requirements, and (ii) extend the Contract's period of performance through 30 Nov 07, and revise various delivery dates accordingly.

2. Modification P00004 changes the negotiated contract value and obligated contract amounts as follows:

Previous Negotiated Contract Value:	\$1,666,687
Negotiated Value This Action:	<u>\$ 546,201</u> (Gov't: \$546,201; Contractor: \$0)
Total Negotiated Contract Value:	\$2,212,888

3. In Section B, under CLIN 0001, the "Estimated Cost," and "Total Amounts" are revised as follows:

Previous (Mod. P00003)		Increase (Mod. P00004)	Revised (Mod. P00004)
Est. Cost:	\$1,619,702	Est. Cost: \$546,201	Est. Cost: \$2,165,903
Fixed Fee:	<u>\$ 37,617</u>	Fixed Fee: <u>\$ 0</u>	Fixed Fee: <u>\$ 37,617</u>
Total Amount:	\$1,657,319	Total Amount: \$546,201	Total Amount: \$2,203,520

In Section B, under CLIN 0001, the following share arrangement is also revised as follows:

Previous (Mod. P00003)		Increase (Mod. P00004)	Revised (Mod. P00004)
GOVERNMENT SHARE:		GOVERNMENT SHARE:	GOVERNMENT SHARE:
Est. Cost:	\$1,059,225	Est. Cost: \$546,201	Est. Cost: \$1,605,426
Fixed Fee:	<u>\$ 37,617</u>	Fixed Fee: <u>\$ 0</u>	Fixed Fee: <u>\$ 37,617</u>
Total Amount:	\$1,096,842	Total Amount: \$546,201	Total Amount: \$1,643,043

CONTRACTOR SHARE:		CONTRACTOR SHARE:	CONTRACTOR SHARE:
Est. Cost:	\$ 560,477	Est. Cost: \$ 0	Est. Cost: \$ 560,477
Fixed Fee:	<u>\$ 0</u>	Fixed Fee: <u>\$ 0</u>	Fixed Fee: <u>\$ 0</u>
Total Amount:	\$ 560,477	Total Amount: \$ 0	Total Amount: \$ 560,477

4. Contract Section B (Supplies or Services and Prices/Costs), Section C (Description/Specification/Work Statement), Section F (Deliveries or Performance), Section G (Contract Administration Data) and Exhibit A, Contract Data Requirements List (CDRL, DD Form 1423), Data Item Nos. A003 (Scientific and Technical Reports, Final Report) and A005 (Computer Software Product End Items) have been revised to reflect the changes described in paragraphs 1 through 3 above. The changed pages are attached.

5. Except as changed by Modification P00004, all other Contract terms and conditions, as previously modified, stay the same.

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Name of Offeror or Contractor: ADVANCED PROPULSION TECHNOLOGIES INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	<p>SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS</p> <p><u>ADVANCED PROPULSION TECHNOLOGIES</u></p> <p>NOUN: 4 PROTOTYPE OPOC-POWERED APU SECURITY CLASS: Unclassified</p> <p>Contractor shall furnish all the supplies and services to accomplish the task specified in Section C "Scope of Work," except for Section C.7.1, which falls under CLIN 0002 below.</p> <p>TOTAL NEGOTIATED VALUE:</p> <p>Estimated Cost: \$2,165,903 *</p> <p>Fixed Fee: \$ <u>37,617</u></p> <p>Total Amount: \$2,203,520 *</p> <p>GOVERNMENT SHARE:</p> <p>Estimated Cost: \$1,605,426 *</p> <p>Fixed Fee: \$ <u>37,617</u></p> <p>Total Amount: \$1,643,043 *</p> <p>CONTRACTOR SHARE:</p> <p>Estimated Cost: \$560,477</p> <p>Fixed Fee: \$ <u>0</u></p> <p>Total Amount: \$560,477</p> <p>The Contractor may bill the Government for allowable costs incurred through \$1,059,225. The Contractor shall absorb billable, allowable costs incurred from \$1,059,225.01 through \$1,619,702, thus absorbing the Contractor's \$560,477 cost share. After the Contractor has absorbed its cost share, the Contractor may resume billing the Government for allowable cost incurred beyond \$1,619,702, through the total negotiated estimated cost.</p> <p>* Added by Modification P00004</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u></p>	1	LO		\$ <u>1,643,043.00</u>

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Name of Offeror or Contractor: ADVANCED PROPULSION TECHNOLOGIES INC.		

B.1 ESTIMATED COST AND PAYMENT

B.1.1 The estimated cost for performance of the work required under this contract is as stated in Section B Schedule.

B.1.2 The contractor will be paid for the fixed fee stated in Section B opposite CLIN 0001 for the performance of work under the contract and in accordance with the terms of the Contract Clause entitled FIXED FEE, (Mar 1997), FAR 52.216-8. The fixed fee together with the reimbursement of cost shall constitute full and complete consideration for the contractor's services in connection with the work required and performed under this contract.

B.1.3 Allowable cost shall be determined, and payment thereof shall be provided, in accordance with the Contract Clause hereof entitled ALLOWABLE COST AND PAYMENT.

B.2 PAYMENT

B.2.1 Submission of Public Vouchers.

The contractor may submit public vouchers every two weeks for payment under this contract. The fee will be payable at the time of reimbursement of cost at the same rate to such cost as the total fee of this contract bears to the total estimated cost thereof, subject to any withholding pursuant to provisions of this contract.

B.2.2 Ceiling on Contractor General and Administrative (G&A) Rate.

The Contractor shall not invoice the Government or be reimbursed by the Government for G&A costs at a rate more than the G&A rate shown in Advanced Propulsion Technologies (APT), Inc's., proposal (transmitted to the Government via Ms. Cheryl Samarco's 21 Mar 05 e-mail (5:17 p.m.) entitled, "RE: Corrected Cost - TACOM Proposal," for the life of this contract.

B.3 FUNDS ALLOTTED. The amount of funds currently allotted to this Contract are \$1,652,411. *

B.3.1 For the purpose of the Contract clause, "LIMITATION OF COST," the total amount allotted by the Government to the Contract shall be the amount of funds allotted in paragraph B.3 above.

B.3.2 In performing this Contract, the Contractor is not obligated to incur costs, including fee, in excess of the amount of funds allotted to the Contract, as shown in this clause, nor is the Government obligated to reimburse the Contractor for cost and fee in excess of the amount of funds allotted to the Contract by the Government.

* Revised by Modification P00004

*** END OF NARRATIVE B 0001 ***

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 APU Requirements

The Contractor, acting as an independent contractor and not as an agent of the Government, shall design, develop, build, test, demonstrate, and deliver four (4) prototype Opposed Piston Opposed Cylinder (OPOC) engine-powered auxiliary power units (APUs) meeting the following requirements:

C.1.1 Power output of 4-6 kilowatts (kW) (4 kW is the threshold, or minimum requirement, and 6 kW is the objective, or the desired target). The APU shall be rated 0.8 power factor (pf), lagging, and shall be re-connectable for the following voltages:

- o 120 Volt, single phase, 2 wire
- o 120/240 Volt, single phase, 3 wire
- o 120/208 Volt, three phase, 4 wire

All at 50 or 60 Hz

C.1.2 Be able to start at -10 degrees Celsius (C) (use of engine starting aid fluid is acceptable)

C.1.3 Be fully operational up to 50 degrees C.

C.1.4 Achieve at least 50 hours durability.

C.1.5 Have an operating elevation of up to 2,500 meters.

C.1.6 Have specific fuel consumption less than 650 grams/kW hour.

C.1.7 Meet the following noise level in a radius of 66 ft. at maximum power:

Full Octave Center Frequency (Hz)	Sound Pressure Level (dB)
31.5	55
63	55
125	57
250	57
500	51
1000	53
2000	56
4000	51
8000	53

Microphone Height: 4 ft.

C.1.8 Have specific power not less than 150 watts/kilogram, excluding the weight of the APU's support package (i.e., fuel tank, battery, radiator, and support package frame and panels).

C.1.9 Operate on JP8 fuel, with operator controlled starting aid.

C.1.10 Able to use as a stand-alone generator.

*

C.2 2D Drawings

The Contractor shall produce and deliver two-dimensional (2D) envelope drawings of the OPOC engine, generator, and APU subsystems with the first quarterly technical report. If the OPOC engine, generator, or APU subsystems change after delivery of the first quarterly technical report, the Contractor shall update the applicable 2D drawings and deliver them with the final Scientific and Technical Report.

* Revised by Modification P00004

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C.3 Bill of Material / Specifications

The Contractor shall produce and deliver a bill of material (i.e., a list of components) for the APU, and specifications for all APU subsystems. The bill of materials and specifications are due with the first quarterly technical report. If the bill of material or the specifications change after delivery of the first quarterly technical report, the Contractor shall update the bill of material and specifications, as necessary, and shall deliver the final bill of material and specifications with the final technical report.

C.4 3D CAD Model

As APU development progresses, the Contractor shall update the previously developed three dimensional (3D) computer-aided design (CAD) model of the APU, and shall show the model to the Government at each quarterly technical review meeting. At the conclusion of the contract, the Contractor shall deliver a 3D model reflecting the final design configuration of the deliverable APU, in accordance with (IAW) Appendix A, Contract Data Requirements List (CDRL), Data Item No. A005.

C.5 FEA Analysis

The Contractor shall perform finite element analysis (FEA) of APU components, as necessary, to verify their structural integrity and effect on the overall APU system performance. The Contractor shall provide FEA analysis results to Government, as part of the applicable quarterly technical report.

C.6 Test Plan

The Contractor shall deliver a draft APU test plan to the Contracting Officer's Representative (COR) one (1) month before building the first APU, IAW Appendix A, CDRL, Data Item No. A004. The test plan shall encompass both performance and durability testing, as necessary, and shall include the test objectives and criteria, test schedule, location, number, duration, and frequency of APU-related tests. The COR shall review the draft plan and provide comments to the Contractor within two (2) weeks of receiving the draft plan. The Contractor shall incorporate the COR's comments as necessary, and shall submit a final APU test plan to the COR within two (2) weeks after receiving the COR's comments. If the test plan changes after it's delivered to the COR, the Contractor shall update the plan, as necessary, and deliver it with the final technical report.

C.7 COR Approval of First APU

C.7.1 The Contractor shall provide the status of APU development by demonstrating the first APU at U.S. Army TARDEC, Warren, MI on or about 30 Jan 07. The Contractor shall coordinate the exact date and time of the demonstration with the COR.

C.7.2 The Contractor shall assemble the first APU, including all necessary subsystems/hardware to enable the APU to perform the requirements described in paragraph C.1 above, by 30 Sep 07. The Contractor shall demonstrate the APU's form, fit, and function for the COR at its facility in a test cell environment. *

C.8 Fabrication of Second, Third, and Fourth APUs

Upon COR confirmation that the first APU is acceptable, the Contractor shall build three (3) more APUs capable of meeting the performance requirements described in paragraph C.1 above. The Contractor shall deliver all four (4) APUs to the COR, at U.S. Army TACOM, Warren, MI, by 30 Nov 07. The Contractor shall coordinate the delivery details with the COR prior to delivery. *

C.9 Product Engineering Support

The Contractor shall provide technical support for the four (4) APUs delivered to the Government for a period of six (6) months after delivery. Technical support shall consist of APU problem trouble-shooting, APU repair, and providing on-call technical advice to Government APU users.

C.10 Start-of-Work Meeting

The Contractor shall host a start-of-work meeting, within ten (10) days after contract award, at its facility in Goleta, CA. The Contractor shall outline its plan for completing this project, including identifying work elements and major milestones.

* Revised by Modification P00004

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C.11 Monthly Contractor's Progress, Status and Management Reports

The Contractor shall deliver monthly Contractor's Progress, Status and Management Reports IAW Appendix A, CDRL, Data Item No. A001.

C.12 Quarterly Project Review Meetings

The Contractor shall conduct quarterly project review meetings at three (3) and six (6) months after contract award. These meetings shall review technical progress made during the quarter, including showing the 3D CAD model of the APU, demonstration of any engineering hardware and shall outline the Contractor's plan for the following quarter.

C.13 Quarterly Technical Reports

The Contractor shall deliver quarterly technical reports at three (3) and six (6) months after contract award, IAW Appendix A, CDRL, Data Item No. A002. These reports shall document the Contractor's technical progress for each quarter, and shall outline the Contractor's plan for the following quarter. The technical reports shall include the 2D envelope drawings of the APU and its subsystems (as specified in paragraph C.2 above), the bill of material for the APU, and the specification for the APU subsystems (as specified in paragraph C.3 above), and the FEA analysis of APU components (as specified in paragraph C.5 above).

C.14 APU Demonstration

The Contractor shall demonstrate APU operation at its site in Goleta, CA, to the COR by 30 Sep 07. The Contractor shall * demonstrate APU power output under maximum and continuous electrical load, fuel consumption, noise level, weight, exhaust cleanliness (visual inspection only), and APU general utility (i.e., show and explain the various ways the APU may be used) and operation. The Contractor shall conduct an independent emission test of the APU, and present the results to the COR for information purposes only (this is not a deliverable).

C.15 Final Technical Report

The Contractor shall deliver a final technical report IAW Appendix A, CDRL, Data Item No. A003. The final technical report shall detail all work accomplished, including all findings, test results, demonstration results, and recommendations for potential future work.

* Revised by Modification P00004

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SECTION F - DELIVERIES OR PERFORMANCE

F.3 DELIVERY OF REPORTS AND SOFTWARE

The Contractor shall submit all reports and software electronically in accordance with (IAW) Exhibit A, Contract Data Requirements List (CDRL) (DD Form 1423).

F.4 PERIOD OF PERFORMANCE

The period of performance for this contract is through 30 Nov 07. *

* Revised by Modification P00004

*** END OF NARRATIVE F 0001 ***

Name of Offeror or Contractor: ADVANCED PROPULSION TECHNOLOGIES INC.

SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ ITEM MIPR	OBLG STAT/ ACRN JOB ORD NO	PRIOR AMOUNT	INCREASE/DECREASE AMOUNT	CUMULATIVE AMOUNT
000104	R362C299R3 622601H7700	AD 1 62C299	\$ 100,000.00	\$ 346,201.00	\$ 446,201.00
000105	R372C162R3 622601H9100	AE 2 72C162	\$ 0.00	\$ 200,000.00	\$ 200,000.00
NET CHANGE				\$ 546,201.00	

SERVICE NAME	NET CHANGE BY ACRN	ACCOUNTING CLASSIFICATION	ACCOUNTING STATION	INCREASE/DECREASE AMOUNT
Army	AD	21 62040000066N6N7EP622601255Y S20113	W56HZV	\$ 346,201.00
Army	AE	21 72040000076N6N7EP622601255Y S20113	W56HZV	\$ 200,000.00
NET CHANGE				\$ 546,201.00

	PRIOR AMOUNT OF AWARD	INCREASE/DECREASE AMOUNT	CUMULATIVE OBLIG AMT
NET CHANGE FOR AWARD:	\$ 1,106,210.00	\$ 546,201.00	\$ 1,652,411.00

ACRN	EDI ACCOUNTING CLASSIFICATION
AD 21 060720400000 S20113 66N6N7E622601H7700255Y	62C299S20113 W56HZV
AE 21 070820400000 S20113 76N6N7E622601H9100255Y	72C162S20113 W56HZV

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Name of Offeror or Contractor: ADVANCED PROPULSION TECHNOLOGIES INC.			

SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Exhibit A	CONTRACT DATA REQUIREMENTS LIST (DD FORM 1423)	27-MAR-2007	009	

CONTRACT DATA REQUIREMENTS LIST (DD Form 1423)

Form Approval OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 440 hours per response, including the time for retrieving instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188, Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract No. listed in Block E.

A. CONTRACT LINE ITEM NO.: 0002
B. EXHIBIT.....: A
C. CATEGORY.....:
D. SYSTEM/ITEM.....:
E. CONTRACT NO.....: W56HZV-05-C-0188
F. CONTRACTOR.....: Advanced Propulsion Technologies (APT), Inc.

1. DATA ITEM NO.....: A001
2. TITLE OF DATA ITEM....: Contractor's Progress, Status, and Management Reports
3. SUBTITLE.....: Monthly Progress Reports
4. AUTHORITY.....: DI-MGMT-80227(T)
5. CONTRACT REFERENCES....: Scope of Work (SOW), Sections C.11
6. REQUIRING OFFICE.....: AMSRD-TAR-N
7. DD250 REQ.....: LT
8. APP CODE.....:
9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: See Block 16
11. AS OF DATE:
12. DATE OF FIRST SUB:
See Block 16
13. DATE OF SUBS. SUB:
See Block 16

14. DISTRIBUTION	A. ADDRESSES	B. COPIES:	DRAFT	FINAL
	Erik Kallio, Contracting Officer's Representative (COR), E-mail, KallioE@tacom.army.mil			1
	Robert Beardslee, Contract Specialist, E-mail: beardslr@tacom.army.mil			1
	Stacey Koide, Administrative Contracting Officer (ACO), E-mail: Stacey.Koide@dcma.mil			<u>1</u>
		15. TOTAL:		1 *

* In distributing the electronic report, according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to the Government, sent to Mr. Kallio's, Mr. Beardslee's, and Ms. Koide's e-mail addresses.

16. REMARKS:

a. The Contractor shall prepare and deliver monthly progress reports, starting one (1) month after the contract award date.

b. Complete the reports in accordance with (IAW) Data Item Description (DID) DI-MGMT-80227(T), "Contractor's Progress, Status, and Management Report." The COR is responsible for accepting or rejecting the "Contractor's Progress, Status, and Management Reports." See DID DI-MGMT-80227, at the internet address below, for instructions on completing the required report. Note Tailoring: Delete paragraphs 10.3g, k, and l from DID DI-MGMT-80227.

<http://assist.daps.dla.mil/docimages/0001/48/17/DI80227.PD8>

c. Prepare the reports in the Contractor's format. Submit the reports using any of the following electronic formats:

(1) Files readable using these Microsoft** Office XP or Microsoft** Office 2002 & lower Products: Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print or scan images of spreadsheets are not acceptable. Please see security note below for caution regarding use of macros.

** Registered Trademark

(2) Files in Adobe PDF (Portable Document Format). When scanning documents, scanner should be set to 200 dots per inch.

(3) Files in HTML (Hypertext Markup Language) Format. HTML documents must not contain active links to Internet websites or webpages for reference information. All linked information must be contained within your electronic report, and be accessible offline.

(4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten (10) calendar days before the draft report's due date. All alternate methods must be at no cost to the Government.

(5) Please note that we can no longer accept .zip files due to increasing security concerns.

NOTE. Macros: The virus scanning software used by our e-mail systems cannot always distinguish a macro from a virus. Therefore, sending a macro embedded in an e-mail message or an e-mail attachment may cause the e-mail report to be quarantined.

d. Acceptable media: The Contractor shall submit reports via e-mail. If e-mail is not workable, other acceptable media include 3 1/2 inch disk, or 650 megabyte CD ROM. Identify the software application and version used to create each file submitted.

(1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Previously "zipped" files were accepted, but due to security concerns these zipped attachments cannot be received through our mail system. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: "Message 1 of 3, 2 of 3, 3 of 3."

(2) 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label all submitted disks with the Contract number, the Contractor's name and address, and a contact's phone number. Exterior mailing envelopes containing disks must be addressed to the following address:

Mr. Erik Kallio (AMSRD-TAR-N), MS272
U.S. Army Tank-automotive and Armaments Command (TACOM)
6501 East 11 Mile Road
Warren, MI 48397-5000

NOTE: Please select only one type of electronic media to transmit each report. For instance, do not submit a report via e-mail and CD-ROM.

1. DATA ITEM NO.....: A002
2. TITLE OF DATA ITEM....: Scientific and Technical Reports
3. SUBTITLE.....: Quarterly Technical Reports
4. AUTHORITY.....: DI-MISC-80711A(T)
5. CONTRACT REFERENCES....: Scope of Work (SOW), Sections C.13
6. REQUIRING OFFICE.....: AMSRD-TAR-N
9. DIST. STATEMENT REQUIRED:
12. DATE OF FIRST SUB:
See Block 16
7. DD250 REQ.....: DD
10. FREQUENCY: See Block 16
13. DATE OF SUBS. SUB:
See Block 16
8. APP CODE.....:
11. AS OF DATE:

14. DISTRIBUTION	A. ADDRESSES	B. COPIES:	DRAFT	FINAL
Ken Deylami, Contracting Officer's Representative (COR), E-mail, Deylamik@tacom.army.mil			1	1
Robert Beardslee, Contract Specialist, E-mail: beardslr@tacom.army.mil				1
Stacey Koide, Administrative Contracting Officer (ACO), E-mail: Stacey.Koide@dcma.mil				<u>1</u>
		15. TOTAL:	1	1 *

* In distributing the electronic report, according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to the Government, sent to Mr. Deylami's, Mr. Beardslee's, and Ms. Koide's e-mail addresses.

16. REMARKS:

a. The Contractor shall deliver quarterly "Scientific and Technical Reports" at three (3) and six (6) months after contract award. These reports shall document the Contractor's technical progress for each quarter, and shall outline the Contractor's plan for the following quarter. These quarterly reports shall include the 2D envelope drawings of the Auxiliary Power Unit (APU) and its subsystems (as specified in Section C.2 of this contract), the bill of material for the APU, and the apecification for the APU subsystems (as specified in Section C.3 of this contract), and the Finite Element Analysis (FEA) of the APU components (as specified in Section C.5 of this contract).

b. Complete the report IAW DID DI-MISC-80711A(T), "Scientific and Technical Reports." The COR is responsible for accepting or rejecting the quarterly "Scientific and Technical Reports." See the data item description (DI-MISC-80711A), at the internet address below, for instructions on completing the required reports. Note Tailoring: Delete paragraph 10.2 from DID DI-MISC-80711A.

<http://assist.daps.dla.mil/docimages/0002/27/88/80711A.PD4>

c. Prepare the reports in the Contractor's format. Submit the reports using any of the following electronic formats:

(1) Files readable using these Microsoft** Office XP or Microsoft** Office 2002 & lower Products: Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print or scan images of spreadsheets are not acceptable. Please see security note below for caution regarding use of macros.

(2) Files in Adobe PDF (Portable Document Format). When scanning documents, scanner should be set to 200 dots per inch.

(3) Files in HTML (Hypertext Markup Language) Format. HTML documents must not contain active links to Internet websites or webpages for reference information. All linked information must be contained within your electronic report, and be accessible offline.

(4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten (10) calendar days before the draft report's due date. All alternate methods must be at no cost to the Government.

** Registered Trademark

(5) Please note that we can no longer accept .zip files due to increasing security concerns.

NOTE. Macros: The virus scanning software used by our e-mail systems cannot always distinguish a macro from a virus. Therefore, sending a macro embedded in an e-mail message or an e-mail attachment may cause the e-mail report to be quarantined.

d. Acceptable media: The Contractor shall submit reports via e-mail. If e-mail is not workable, other acceptable media include 3 1/2 inch disk, or 650 megabyte CD ROM. Identify the software application and version used to create each file submitted.

(1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Previously "zipped" files were accepted, but due to security concerns these zipped attachments cannot be received through our mail system. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: "Message 1 of 3, 2 of 3, 3 of 3."

(2) 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label all submitted disks with the Contract number, the Contractor's name and address, and a contact's phone number. Exterior mailing envelopes containing disks must be addressed to the following address:

Mr. Ken Deylami (AMSRD-TAR-N), MS272
U.S. Army Tank-automotive and Armaments Command (TACOM)
6501 East 11 Mile Road
Warren, MI 48397-5000

NOTE: Please select only one type of electronic media to transmit each report. For instance, do not submit a report via e-mail and CD-ROM.

1. DATA ITEM NO.....: A003
 2. TITLE OF DATA ITEM....: Scientific and Technical Reports
 3. SUBTITLE.....: Final Report
 4. AUTHORITY.....: DI-MISC-80711A(T)
 5. CONTRACT REFERENCES...: Scope of Work (SOW), Sections C.15
 6. REQUIRING OFFICE.....: AMSRD-TAR-N 9. DIST. STATEMENT REQUIRED:
 7. DD250 REQ.....: DD 10. FREQUENCY: See Block 16
 8. APP CODE.....: 11. AS OF DATE: 12. DATE OF FIRST SUB:
 See Block 16
 13. DATE OF SUBS. SUB:
 See Block 16

14. DISTRIBUTION	A. ADDRESSES	B. COPIES:	DRAFT	FINAL
Erik Kallio, Contracting Officer's Representative (COR), E-mail, KallioE@tacom.army.mil			1	1
Robert Beardslee, Contract Specialist, E-mail: beardslr@tacom.army.mil				1
Stacey Koide, Administrative Contracting Officer (ACO), E-mail: Stacey.Koide@dcma.mil				<u>1</u>
		15. TOTAL:	1	1 *

* In distributing the electronic report, according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to the Government, sent to Mr. Kallio's, Mr. Beardslee's, and Ms. Koide's e-mail addresses.

16. REMARKS:

a. The Contractor shall deliver one (1) draft "Final Scientific and Technical Report," by 31 Oct 07. **
 This report shall detail all work accomplished, including all findings, test results, demonstration results, and recommendations for potential future work.

b. The draft report shall also include a completed Standard Form (SF) 298 (Report Documentation Page) as the report's cover sheet. The COR shall review the draft report and return it to the Contractor by 15 Nov 07, with comments, if any. The Contractor shall submit one (1) final "Final Scientific and Technical Report" (with the completed SF 298) by 30 Nov 07. This report shall provide the following information: **

c. Complete the report IAW DID DI-MISC-80711A(T), "Scientific and Technical Reports." The COR is responsible for accepting or rejecting the draft and final reports, and for submitting the approved final report to the Defense Technical Information Center (DTIC), in Ft. Belvoir, VA. See the data item description (DI-MISC-80711A), at the internet address below, for instructions on completing the required report. Note Tailoring: Delete paragraph 10.2 from DID DI-MISC-80711A.

<http://assist.daps.dla.mil/docimages/0002/27/88/80711A.PD4>

You may download the SF 298 form, including instructions for completing the form, at the following internet address:

http://www.dtic.mil/dtic/submitting/how_submit.html

For each unclassified report, the Contractor shall fill in Block 12a (Distribution/Availability Statement) of the SF 298 with one of the following statements:

(a) Approved for public release; distribution unlimited

(b) Distribution authorized to U.S. Government Agencies only; contains proprietary information

Note: After reviewing the Contractor's entry in Block 12a, TACOM has final responsibility for assigning a distribution statement.

d. Prepare the reports in the Contractor's format. Submit the reports using any of the following electronic formats:

(1) Files readable using these Microsoft*** Office XP or Microsoft*** Office 2002 & lower Products: Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print or scan images of spreadsheets are not acceptable. Please see security note below for caution regarding use of macros.

** Revised by Modification P00004

*** Registered Trademark

(2) Files in Adobe PDF (Portable Document Format). When scanning documents, scanner should be set to 200 dots per inch.

(3) Files in HTML (Hypertext Markup Language) Format. HTML documents must not contain active links to Internet websites or webpages for reference information. All linked information must be contained within your electronic report, and be accessible offline.

(4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten (10) calendar days before the draft report's due date. All alternate methods must be at no cost to the Government.

(5) Please note that we can no longer accept .zip files due to increasing security concerns.

NOTE. Macros: The virus scanning software used by our e-mail systems cannot always distinguish a macro from a virus. Therefore, sending a macro embedded in an e-mail message or an e-mail attachment may cause the e-mail report to be quarantined.

e. Acceptable media: The Contractor shall submit reports via e-mail. If e-mail is not workable, other acceptable media include 3 1/2 inch disk, or 650 megabyte CD ROM. Identify the software application and version used to create each file submitted.

(1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Previously "zipped" files were accepted, but due to security concerns these zipped attachments cannot be received through our mail system. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: "Message 1 of 3, 2 of 3, 3 of 3."

(2) 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label all submitted disks with the Contract number, the Contractor's name and address, and a contact's phone number. Exterior mailing envelopes containing disks must be addressed to the following address:

Mr. Erik Kallio (AMSRD-TAR-N), MS272
U.S. Army Tank-automotive and Armaments Command (TACOM)
6501 East 11 Mile Road
Warren, MI 48397-5000

NOTE: Please select only one type of electronic media to transmit each report. For instance, do not submit a report via e-mail and CD-ROM.

1. DATA ITEM NO.....: A004
2. TITLE OF DATA ITEM....: Test Plan
3. SUBTITLE.....:

4. AUTHORITY.....: DI-NDTI-80566
5. CONTRACT REFERENCES...: Scope of Work (SOW), Sections C.6
6. REQUIRING OFFICE.....: AMSRD-TAR-N 9. DIST. STATEMENT REQUIRED: 12. DATE OF FIRST SUB:
See Block 16
7. DD250 REQ.....: DD 10. FREQUENCY: See Block 16 13. DATE OF SUBS. SUB:
See Block 16
8. APP CODE.....: 11. AS OF DATE:

14. DISTRIBUTION	A. ADDRESSES	B. COPIES:	DRAFT	FINAL
Erik Kallio, Contracting Officer's Representative (COR), E-mail, KallioE@tacom.army.mil			1	1
Robert Beardslee, Contract Specialist, E-mail: beardslr@tacom.army.mil				1
Stacey Koide, Administrative Contracting Officer (ACO), E-mail: Stacey.Koide@dcma.mil				1
		15. TOTAL:	1	1 *

* In distributing the electronic "Test Plan", according to the schedule in Block 16 below, the Contractor shall deliver one (1) copy to the Government, sent to Mr. Kallio's, Mr. Beardslee's, and Ms. Koide's e-mail addresses.

16. REMARKS:

a. The Contractor shall deliver a draft APU "Test Plan" to the Contracting Officer's Representative (COR) one (1) month before building the first APU. The "Test Plan" shall encompass both performance and durability testing, as necessary, and shall include the test objectives and criteria, test schedule, location, number, duration, and frequency of APU-related tests. The COR shall review the draft "Test Plan" and provide comments to the Contractor within two (2) weeks of receiving the draft "Test Plan." The Contractor shall incorporate the COR's comments, as necessary, and shall submit a final APU "Test Plan" to the COR within two (2) weeks after receiving the COR's comments.

b. Complete the report IAW DID DI-NDTI-80566, "Test Plan." The COR is responsible for accepting or rejecting the draft and final "Test Plan." See the data item description (DI-NDTI-80566), at the internet address below, for instructions on completing the required reports.

<http://assist.daps.dla.mil/docimages/0001/49/10/W0237W.PD7>

c. Prepare the "Test Plan" in the Contractor's format. Submit the "Test Plan" using any of the following electronic formats:

(1) Files readable using these Microsoft** Office XP or Microsoft** Office 2002 & lower Products: Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print or scan images of spreadsheets are not acceptable. Please see security note below for caution regarding use of macros.

(2) Files in Adobe PDF (Portable Document Format). When scanning documents, scanner should be set to 200 dots per inch.

(3) Files in HTML (Hypertext Markup Language) Format. HTML documents must not contain active links to Internet websites or webpages for reference information. All linked information must be contained within your electronic report, and be accessible offline.

(4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten (10) calendar days before the draft report's due date. All alternate methods must be at no cost to the Government.

(5) Please note that we can no longer accept .zip files due to increasing security concerns.

NOTE. Macros: The virus scanning software used by our e-mail systems cannot always distinguish a macro from a virus. Therefore, sending a macro embedded in an e-mail message or an e-mail attachment may cause the e-mail report to be quarantined.

** Registered Trademark

d. Acceptable media: The Contractor shall submit reports via e-mail. If e-mail is not workable, other acceptable media include 3 1/2 inch disk, or 650 megabyte CD ROM. Identify the software application and version used to create each file submitted.

(1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Previously "zipped" files were accepted, but due to security concerns these zipped attachments cannot be received through our mail system. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: "Message 1 of 3, 2 of 3, 3 of 3."

(2) 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM via U.S. Mail or other carrier. The Contractor shall label all submitted disks with the Contract number, the Contractor's name and address, and a contact's phone number. Exterior mailing envelopes containing disks must be addressed to the following address:

Mr. Erik Kallio (AMSRD-TAR-N), MS272
U.S. Army Tank-automotive and Armaments Command (TACOM)
6501 East 11 Mile Road
Warren, MI 48397-5000

NOTE: Please select only one type of electronic media to transmit each report. For instance, do not submit a report via e-mail and CD-ROM.

1. DATA ITEM NO.....: A005
2. TITLE OF DATA ITEM....: Computer Software Product End Items
3. SUBTITLE.....: Three-Dimensional (3D) Computer Aided Design (CAD) Model

4. AUTHORITY.....: DI-MCCR-80700
5. CONTRACT REFERENCES...: Scope of Work (SOW), Sections C.4
6. REQUIRING OFFICE.....: AMSRD-TAR-N 9. DIST. STATEMENT REQUIRED: 12. DATE OF FIRST SUB:
See Block 16
7. DD250 REQ.....: DD 10. FREQUENCY: See Block 16 13. DATE OF SUBS. SUB:
See Block 16
8. APP CODE.....: 11. AS OF DATE:

14. DISTRIBUTION	A. ADDRESSES	B. COPIES:	DRAFT	FINAL
Erik Kallio, Contracting Officer's Representative (COR), E-mail, KallioE@tacom.army.mil				1
		15. TOTAL:		1

16. REMARKS:

a. The Contractor shall deliver a 3D CAD Model of the final design configuration of the deliverable APU by 30 Nov 07. The COR is responsible for accepting or rejecting the delivered 3D CAD Model. *

b. See DI-MCCR-80700 at the following web site:

<http://assist.daps.dla.mil/docimages/0001/48/72/W0285W.PD8>

c. Develop the 3D CAD Model in the Contractor's format. Submit the 3D CAD Model to Mr. Kallio (COR) at the following address:

Mr. Erik Kallio (AMSRD-TAR-N), MS272
U.S. Army Tank-automotive and Armaments Command (TACOM)
6501 East 11 Mile Road
Warren, MI 48397-5000

* Revised by Modification P00004